

ABSTRACT OF THE DISCLOSURE

A high accuracy stage supported in six degrees of freedom by electromagnetic bearings. Movements in the horizontal plane of the stage are controlled by variable reluctance actuators which are mounted between the high accuracy stage and a coarse stage so as not to distort the high accuracy stage during movements thereof. The high accuracy stage is supported in three vertical degrees of freedom by electromagnetic actuators disposed between the coarse stage and the high accuracy stage and aided by a supplemental vertical support disposed adjacent to the actuators. Preferably, the high accuracy stage is suspended from a bar supported by the supplemental vertical support, which is preferably air bellows.